

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeremy Mereness on 10/14/10.

Claim 36 has been amended, see below. Claims 1-25, and 27 have been cancelled.

36. (currently amended) A communication system comprising:

a transmitter apparatus for performing transmission using transmission signals generated on the basis of data symbols of a specified transmission method, said transmitter apparatus comprising a first FFT processing part for converting said data symbols to said frequency domain data, an interleaver for generating interleave-processed data being obtained by performing specified rearrangement processes on said frequency domain data converted by said first FFT processing part, and an IFFT processing part for converting said interleave-processed data to time domain signals, said interleaver comprising an interleaver memory having  $Q$  rows and  $N/Q$  columns, and said interleaver configured to generate and output  $N$  data points from

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$Q$  data points inputted from said first FFT processing part,  $N$  being greater than  $Q$ , the data points of any column being associated with only one user; and

a receiver apparatus for restoring said data symbols on the basis of the received reception signals obtained by receiving said transmission signals, said receiver apparatus comprising a second FFT processing part for converting said received time domain signals to received frequency domain data, a de-interleaver for generating de-interleave-processed data by performing specified rearrangement processes on said received frequency domain data, said de-interleaver configured to generate and output  $Q$  data points from  $N$  data points inputted to the de-interleaver,  $N$  being greater than  $Q$ .

### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Applicant discloses a transmitting/receiving device. In which an FFT process to an interleaver to an IFFT unit is done.

The interleaver further contains an interleaver memory having  $Q$  rows and  $N/Q$  columns, wherein the interleaver is configured to write  $Q$  data points received from said FFT processing part into a column of the interleaver memory, the data points of any column being associated with only one user. The details of such interleaver are not found in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANTIAGO GARCIA whose telephone number is (571)270-5182. The examiner can normally be reached on MONDAY- FRIDAY 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SG/

/CHIEH M FAN/

Supervisory Patent Examiner, Art Unit 2611